

1167-47-139

Donald W. Hadwin* (operatorguy@gmail.com), 33 Academic Way, MATH DEPT UNH, Durham, NH 03824. *Generalizations of theorems of Glimm and Voiculescu in infinite factor von Neuman algebras*. Preliminary report.

D. Voiculescu used J. Glimm's characterization of states that annihilate the compact operators to prove his results on approximate (unitary) equivalence. We prove a version of Glimm's theorem for a special class of RR0 C^* -algebras. We also prove specialized versions of Voiculescu's results in certain factor von Neumann algebras acting on possibly nonseparable Hilbert spaces. We prove that every closed linear subspace of a type III factor with a separable predual is approximately hyperreflexive with constant 1. (Received March 04, 2021)